

Submittal Data

PROJECT:	Hurley Engineering-TPE3 READY TO SHIP	UNIT TAG:		QUANTITY:	1
		TYPE OF SERVICE:			
REPRESENTATIVE:	Hurley Engineering	SUBMITTED BY:	Devin Carle	DATE:	2/10/2020
ENGINEER:		APPROVED BY:		DATE:	
CONTRACTOR:	To Be Determined	ORDER NO.:		DATE:	



Product photo could vary from the actual product

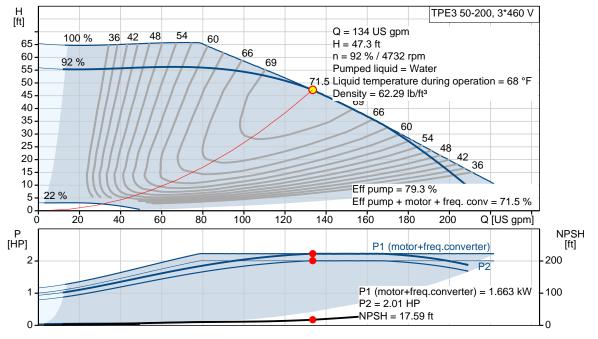
TPE3 50-200 S-A-G-I-BQQE-HCC

Single-stage stainless steel in-line pumps with frequency converters

Conditions of Service		
Flow:	134 US gpm	
Head:	47.3 ft	
Efficiency:	71.5 %	
Liquid:	Water	
Temperature:	68 °F	
NPSH required:	17.59 ft	
Viscosity:		
Specific Gravity:	1.000	

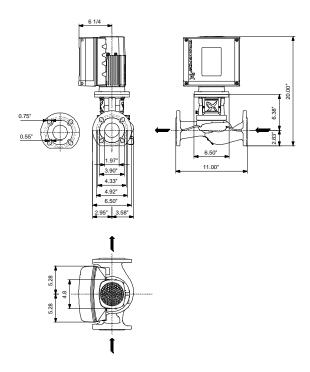
Pump Data	
Liquid temperature range:	-13 248 °F
Maximum ambient temperature:	122 °F
Shaft seal:	BQQE
Pipe connection:	DN 50
Product number:	98819651

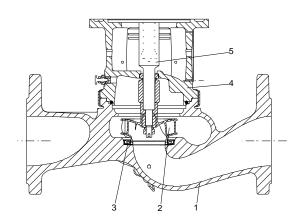
Motor Data		
Rated power - P2:	2 HP	
Rated voltage:	440-480 V	
Main frequency:	60 Hz	
Number of poles:	0	
Enclosure class:	IP55	
Insulation class:	F	
Motor protection:	YES	
Motor type:	90B	
Motor_efficiency:	88.4 %	





Submittal Data





Materials:

Pump housing: Stainless steel

ASTM CF8

Composite PES/PP 30% GF Impeller:

Material code:



Created by: Phone:

Date: 2/26/2020

Project:

1

Client:

Reference number:

Client number: Contact:

Count | Description

TPE3 50-200 S-A-G-I-BQQE-HCC



Product No.: 98819651

The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.

The shaft seal is according to EN 12756. Pipework connection is via PN 16 ANSI flanges.

Pipework connection is via PN 16 ANSI flanges.

The pump is fitted with a fan-cooled, permanent-magnet synchronous motor. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.

The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.

Controls:

Frequency converter: Built-in

Liquid:

Pumped liquid: Water
Liquid temperature range: -13 .. 248 °F
Selected liquid temperature: 68 °F
Density: 62.29 lb/ft³

Technical:

Pump speed on which pump data is based: 4800 rpm

Actual calculated flow: 134 US gpm
Resulting head of the pump: 47.3 ft
Actual impeller diameter: 2.91 in
Code for shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B2

Materials:

Pump housing: Stainless steel

ASTM CF8 EN 1.4308

Impeller: Composite PES/PP 30% GF

Installation:

Range of ambient temperature: -4 .. 122 °F Maximum operating pressure: PN 16 bar Type of connection: ANSI



Created by: Phone:

Date: 2/26/2020

Project:

Client:

Client number:

Contact:

Count | Description

Reference number:

Pipe connection: DN 50 Pressure rating for pipe connection: PN 16

Flange size for motor: 56C

Electrical data:

Motor type:90BIE Efficiency class:IE5Rated power - P2:2 HPMain frequency:60 Hz

Rated voltage: 3 x 440-480 V

Rated current: 2.8 A Cos phi - power factor: 0.83

Rated speed: 480-5900 rpm IE efficiency: 88.4% Motor efficiency at full load: 88.4 % Number of poles: 0 Enclosure class (IEC 34-5): IP55

Enclosure class (IEC 34-5): IP5
Insulation class (IEC 85): F

Motor Number: 99630350

Others:

DOE Pump Energy Index VL: 0.35
Net weight: 64.8 lb
Gross weight: 80.7 lb
Country of origin: HU

Custom tariff no.: 8413.70.2022



Created by: Phone:

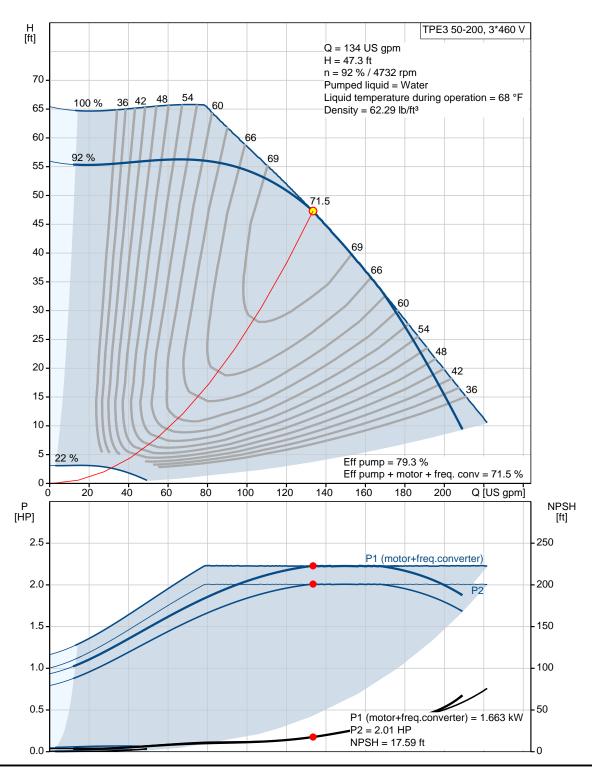
Date: 2/26/2020

Project: Client:

Reference number: Client number:

Contact:

98819651 TPE3 50-200 S-A-G-I-BQQE-HCC 60 Hz





Created by: Phone:

Date: 2/26/2020

Project:

Reference number:

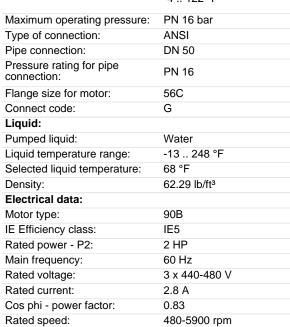
Client:

Client number:

Contact:

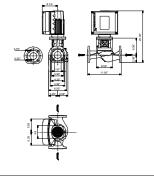
Description	Value
General information:	
Product name:	TPE3 50-200 S-A-G-I-BQQE-HCC
Product No.:	98819651
EAN:	5712601844376
	5712601844376
Technical:	
Pump speed on which pump data is based:	4800 rpm
Actual calculated flow:	134 US gpm
Resulting head of the pump:	47.3 ft
Head max:	65.62 ft
Actual impeller diameter:	2.91 in
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A
Materials:	
Pump housing:	Stainless steel
	ASTM CF8
	EN 1.4308
Impeller:	Composite PES/PP 30% GF
Material code:	[
Installation:	
Range of ambient temperature:	-4 122 °F

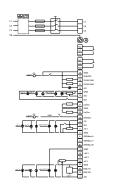
H [ft]	TPE3 50-200, 3*460 V	
70 -	Q = 134 US gpm H = 47.3 ft	
65 -	n = 47.3 it 100 %2n = 92 % / 4732 rpm	
	Pumped liquid = Water	
60 -	Liquid temperature during operation = 68 °F Density = 62.29 lb/ft³	
55 -	Delisity = 02.23 lont	
50 -	71.5	
45 -		
40 -	69	
35 -		
30 -	60	
25 -	54	
20 -	42	
15 -	36	
10 -		
5 -	22 % Eff pump = 79.3 %	
0 -	Eff pump + motor + freq. conv = 71.5 %	
C	50 100 150 Q [US gpm]	
P [HP]		NPSH [ft]
	P1 (motor+freq.converter)	
2 -	P2	- 200
1 -		- 100
	P1 (motor+freq.converter) = 1.663 kW P2 = 2.01 HP	
	NPSH = 17.59 ft	
0 -		L ₀



88.4%

88.4 %





IE efficiency:

Number of poles:

Motor efficiency at full load:



Created by: Phone:

Date: 2/26/2020

Project:

Reference number:

Client:

Client number:

Contact:

Description	Value
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protection:	YES
Motor Number:	99630350
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
DOE Pump Energy Index VL:	0.35
Net weight:	64.8 lb
Gross weight:	80.7 lb
Config. file no:	98484784
Country of origin:	HU
Custom tariff no.:	8413.70.2022



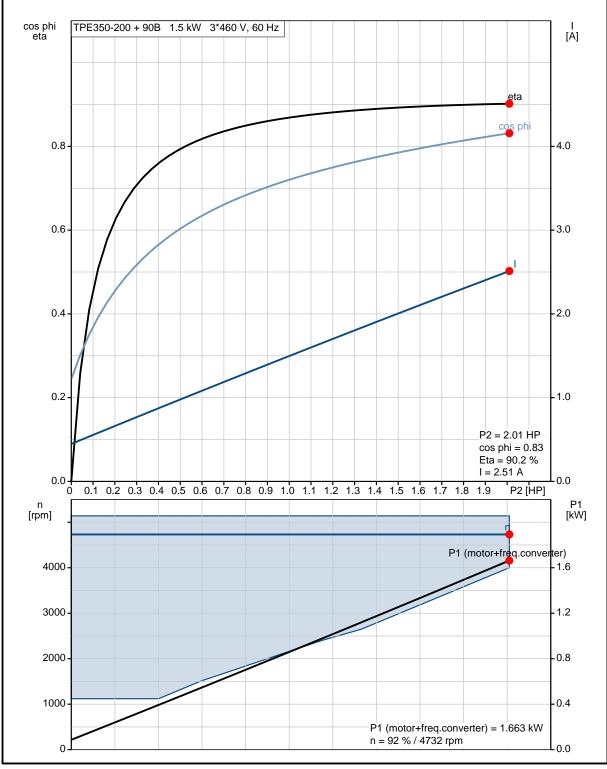
Created by: Phone:

Date: 2/26/2020

Project: Client:

Reference number: Client number: Contact:

98819651 TPE3 50-200 S-A-G-I-BQQE-HCC 60 Hz





Created by: Phone:

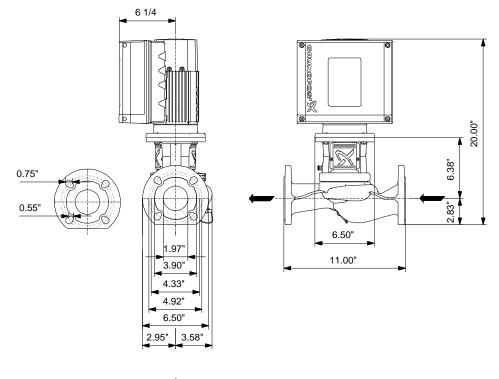
Date: 2/26/2020

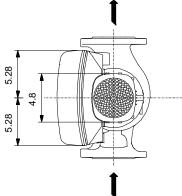
Project: Client:

Reference number: Client number:

Contact:

98819651 TPE3 50-200 S-A-G-I-BQQE-HCC 60 Hz





Note! All units are in [in] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



Created by: Phone:

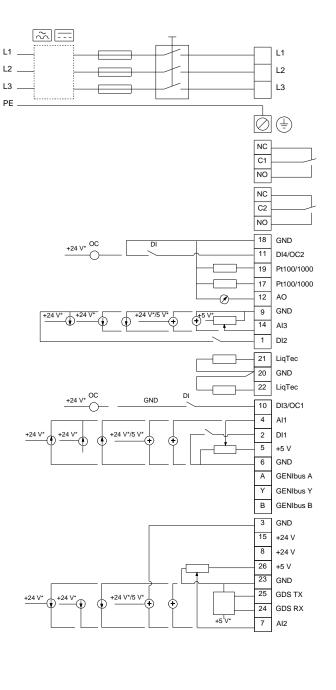
Date: 2/26/2020

Project: Client:

Reference number: Client number:

Contact:

98819651 TPE3 50-200 S-A-G-I-BQQE-HCC 60 Hz



All units are [in] unless otherwise presented.



Created by: Phone:

Date: 2/26/2020

Project:

Client:

Reference number:

Client number: Contact:

Order Data:

Product name: TPE3 50-200 S-A-G-I-BQQE-HCC

Amount: 1

Product No.: 98819651

Total: Price on request